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(54) **SYSTEMS AND METHODS FOR PERMISSION ARBITRATED TRANSACTION SERVICES**

(75) Inventors: **Christer J. DiChiara**, San Diego, CA (US); **Kristin M. LeFevre**, Orange, CA (US); **Randall P. Mitchum**, Tustin, CA (US); **Bryan David Wresinski**, Signal Hill, CA (US)

(73) Assignee: **Experian Information Solutions, Inc.**, Costa Mesa, CA (US)

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*H04L 29/06* (2006.01)  
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(52) **U.S. Cl.**  
CPC ..... *H04L 63/126* (2013.01); *H04L 63/10* (2013.01)  
USPC ..... *726/4*; *726/12*; *726/26*; *713/182*; *705/1*; *705/27.1*; *705/38*; *709/204*

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USPC ..... *726/4*, *12*, *26*; *713/182*; *705/27.1*, *38*, *1*; *709/204*

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*Primary Examiner* — Andrew Nalven

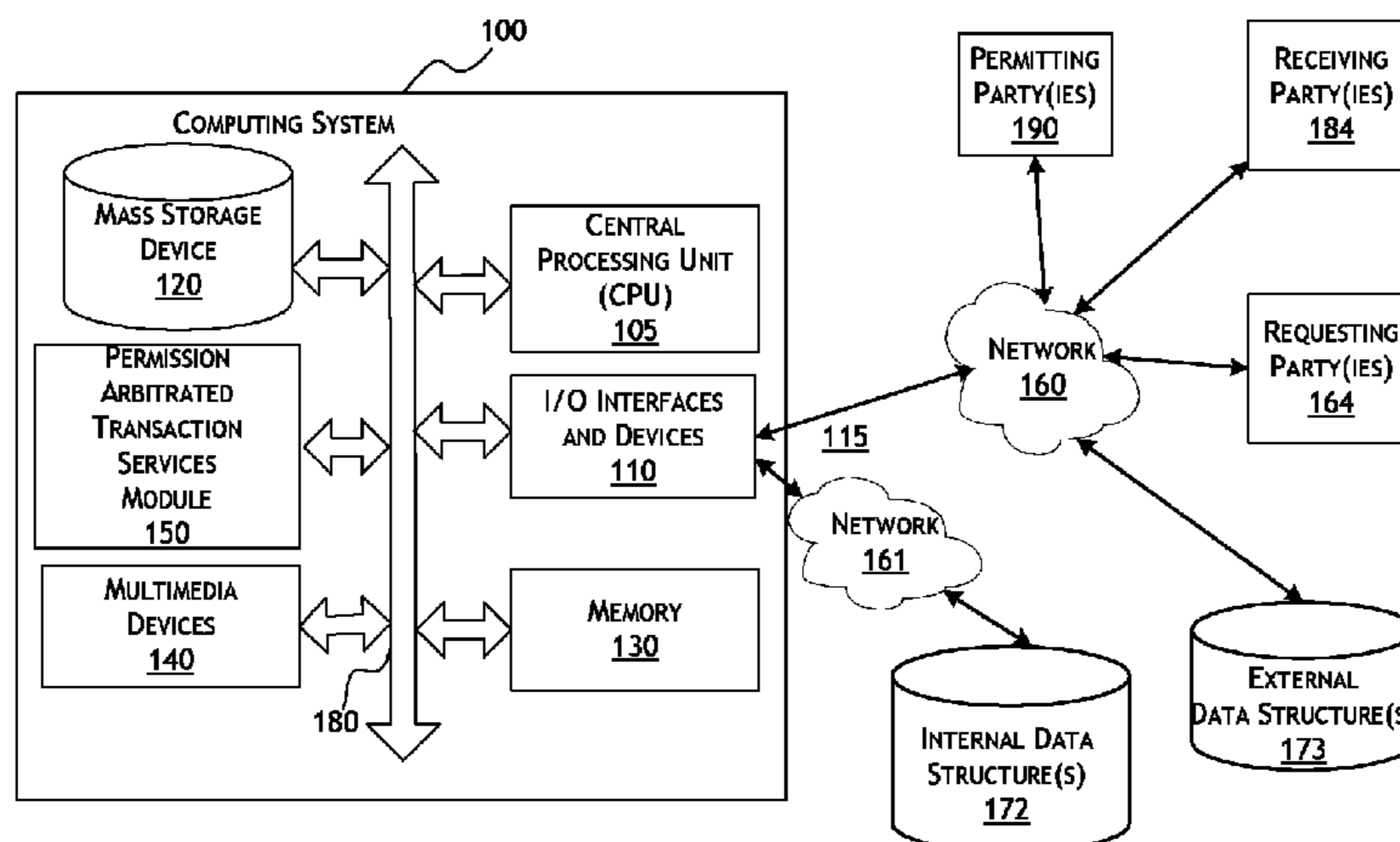
*Assistant Examiner* — Courtney Fields

(74) *Attorney, Agent, or Firm* — Knobbe Martens Olson & Bear LLP

(57) **ABSTRACT**

Systems and methods disclosed allow a permitting party to share personal information with a receiving party. The receiving party may use the information to authenticate the permitting party, assess the permitting party, determine if the permitting party is compatible with one or more other users associated with the receiving party, or validate the permitting party. The permitting party may define how much of the permitting party's personal information is shared, and/or limit the use of the information for one or more specific purposes. A requesting party may also set up criteria for the types of information it wants to review along with the intended use of the information. The systems and methods disclosed also enables permitting parties the ability to grant requesting parties access to requested information.

**22 Claims, 6 Drawing Sheets**



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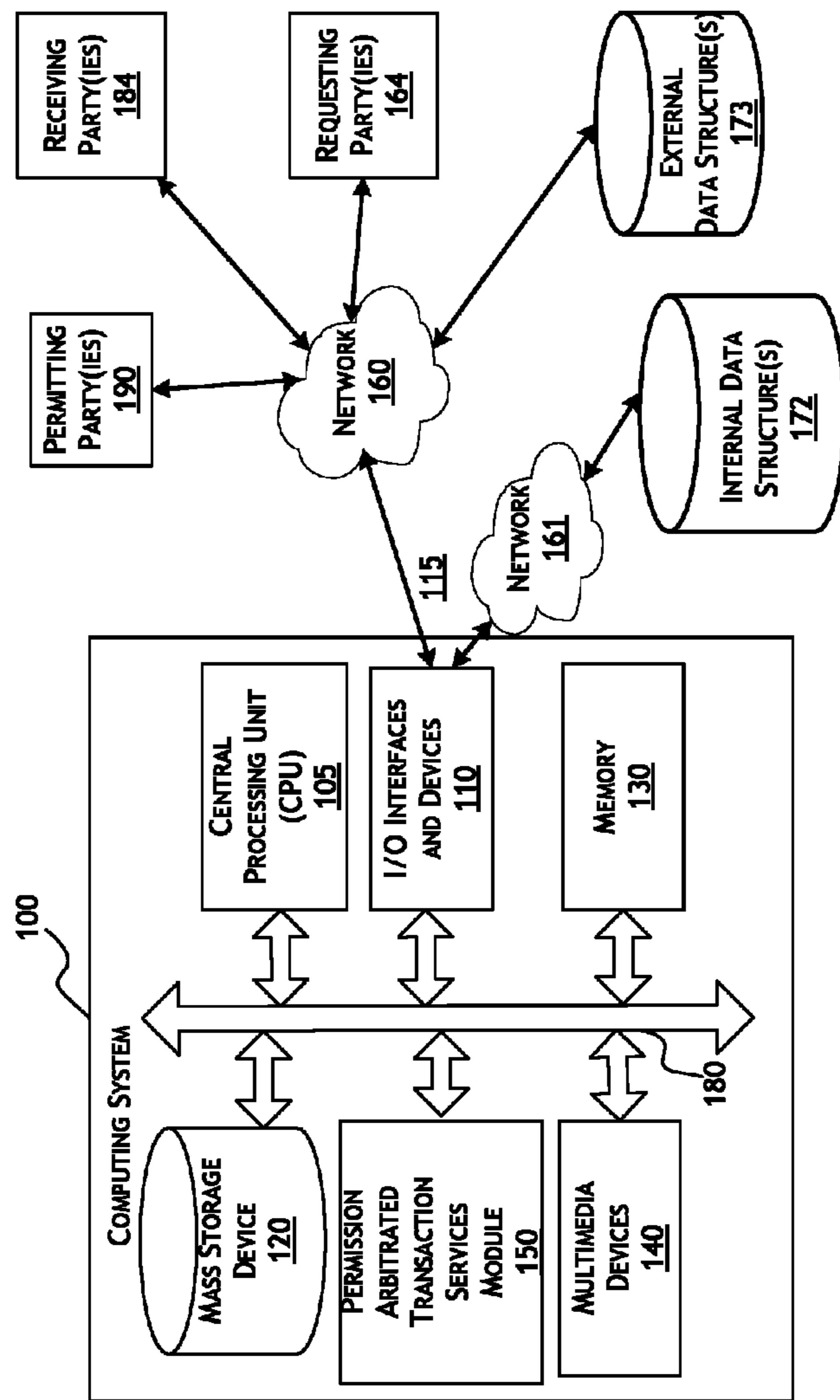


FIG. 1

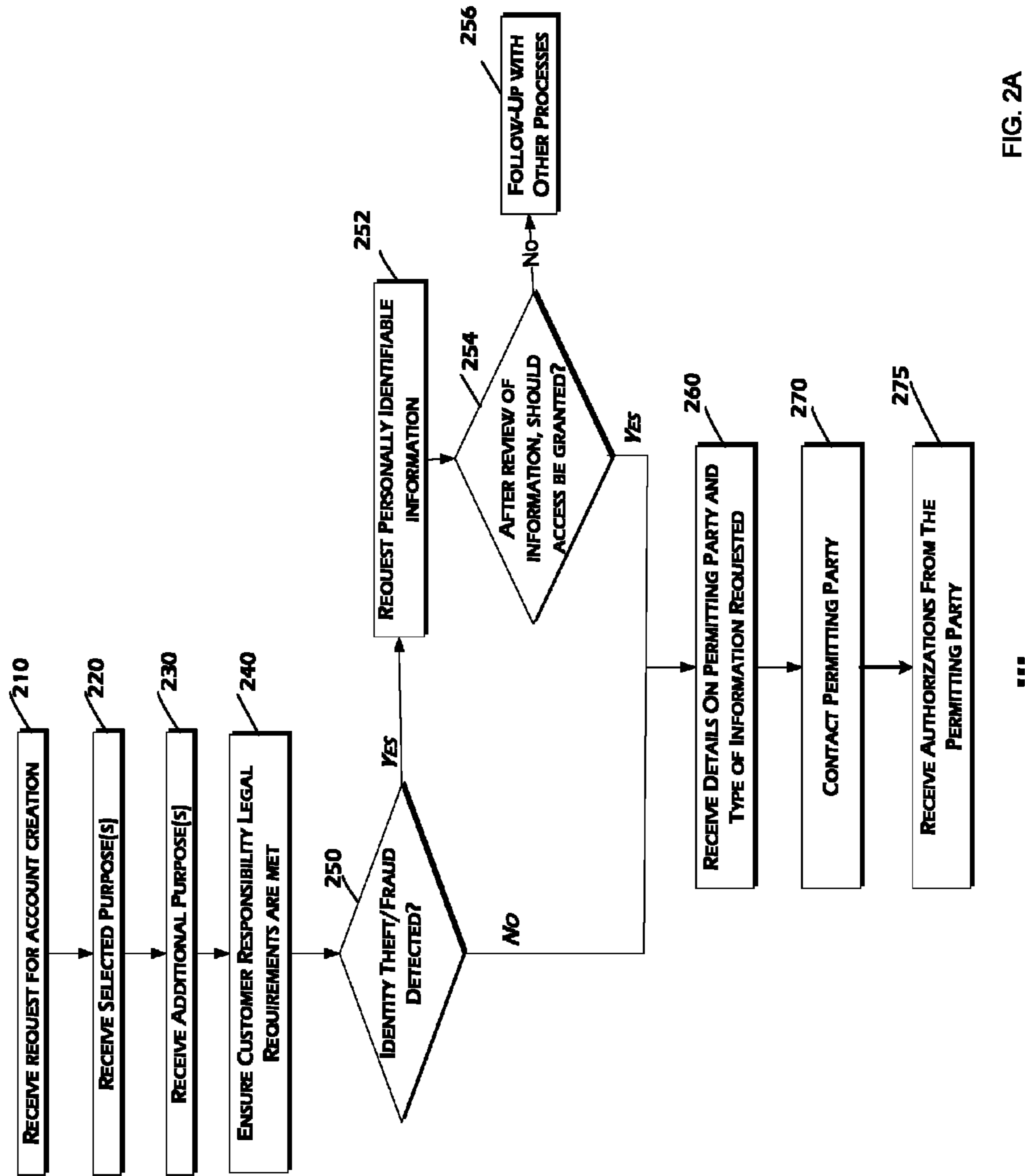


FIG. 2A

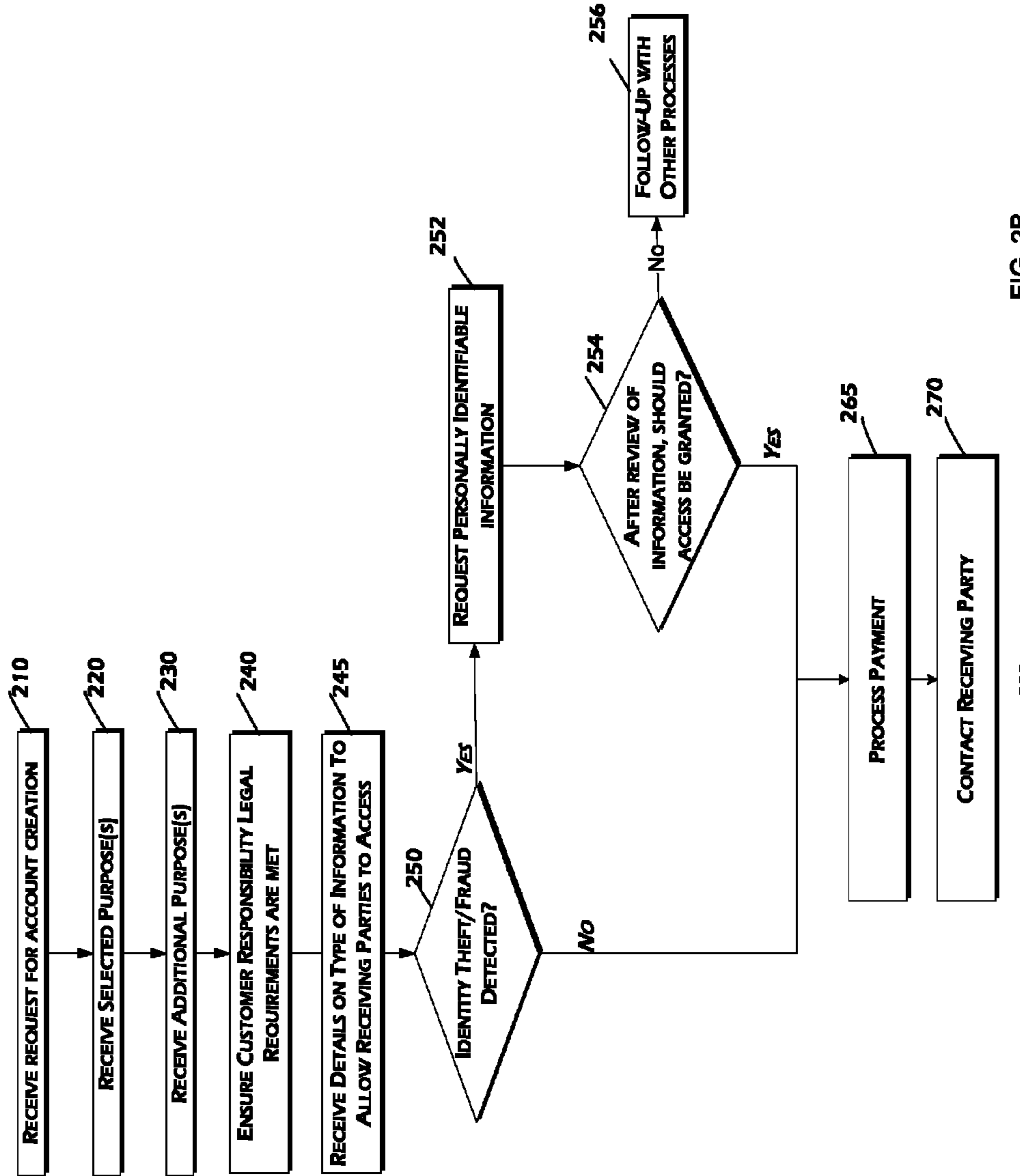


FIG. 2B

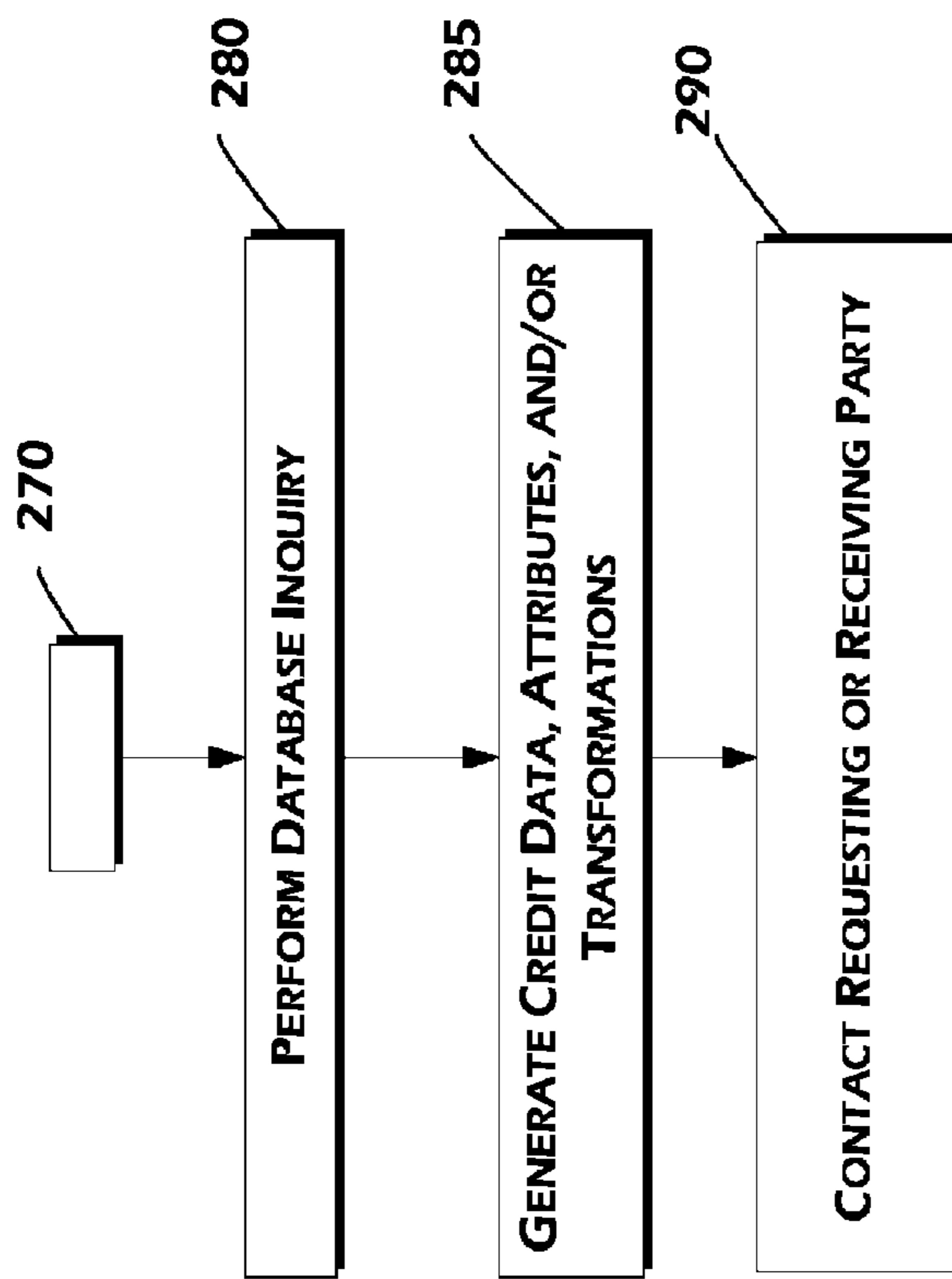


FIG. 2C

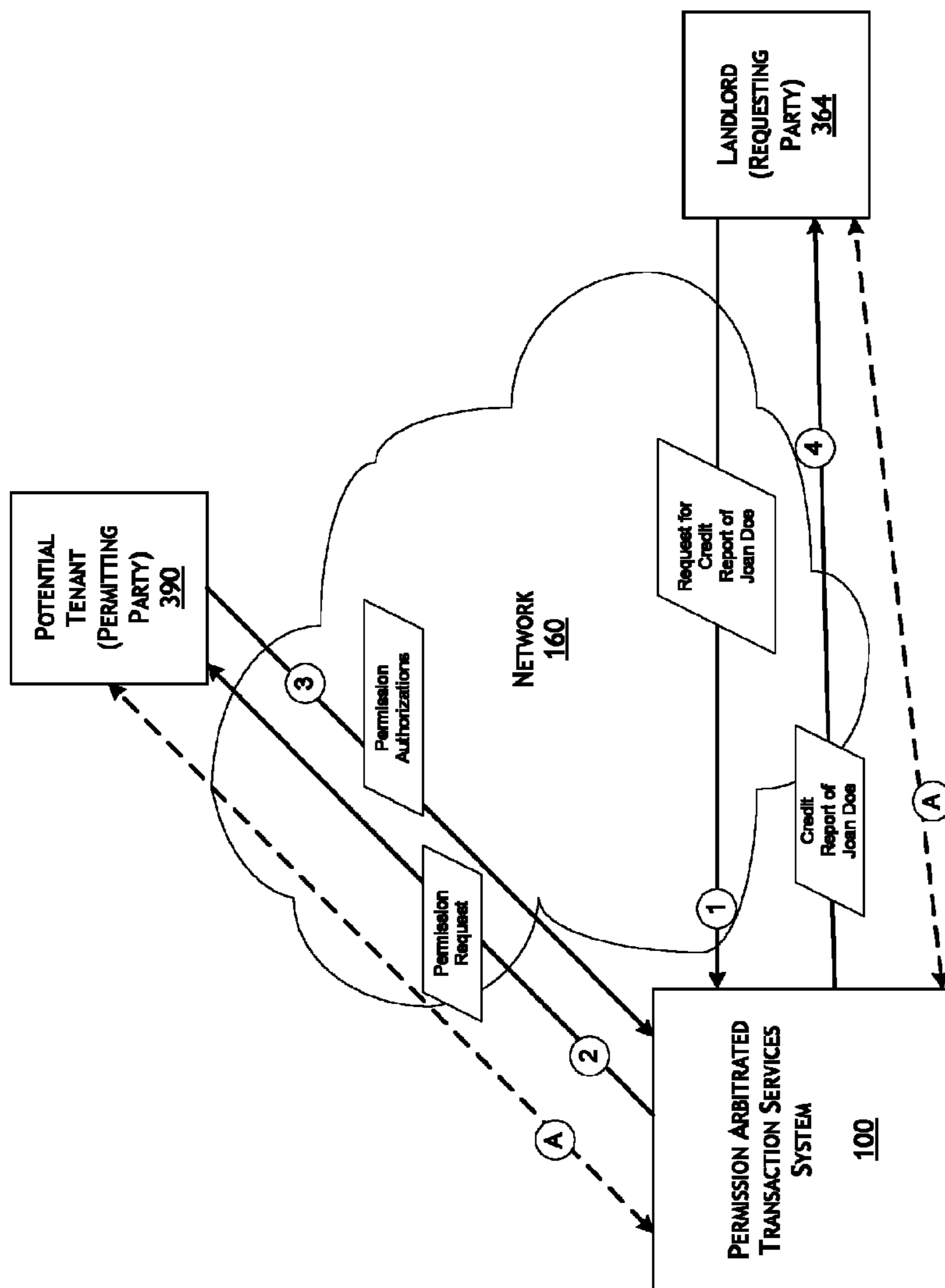


FIG. 3



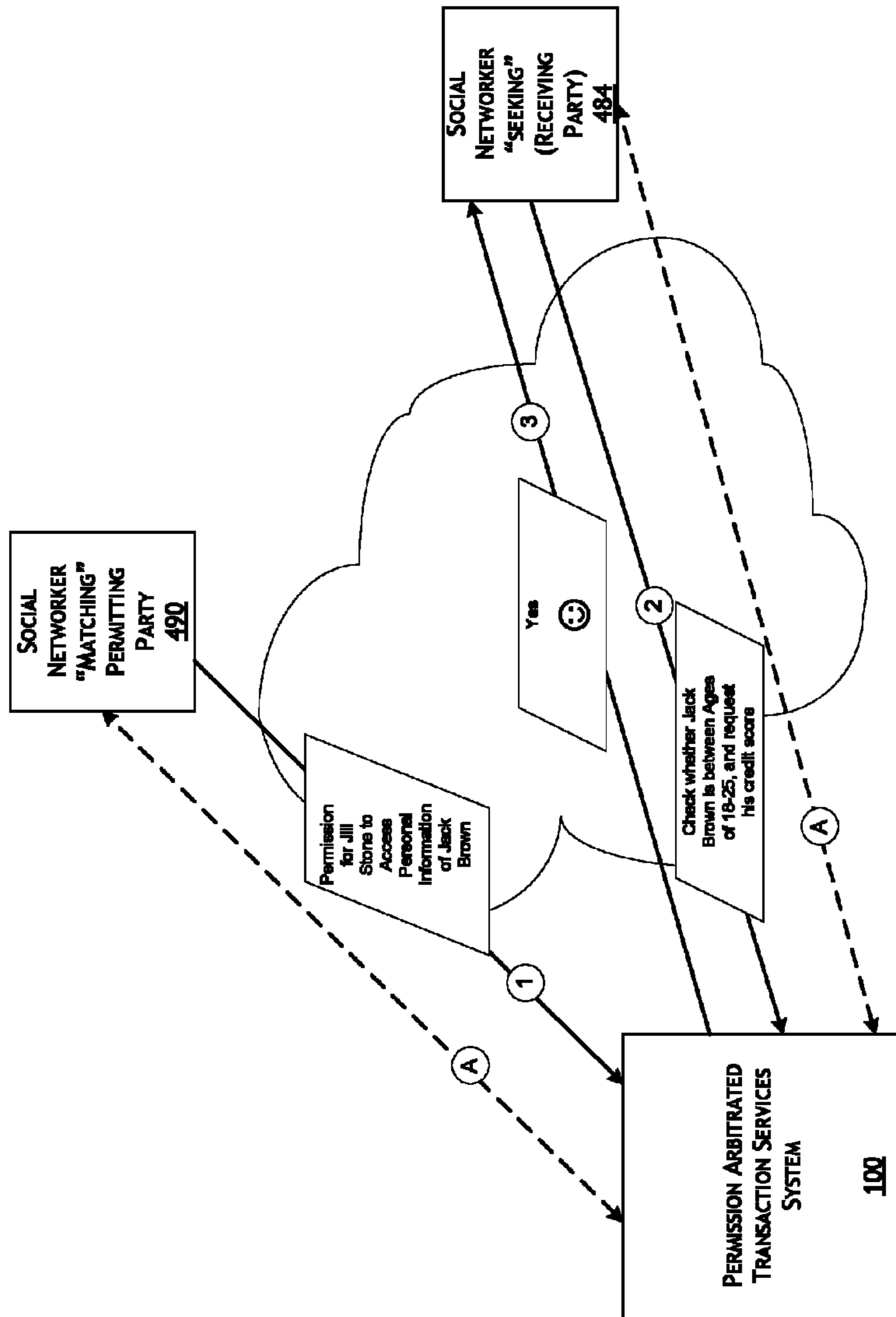


FIG. 4

## SYSTEMS AND METHODS FOR PERMISSION ARBITRATED TRANSACTION SERVICES

### CROSS-REFERENCE TO RELATED APPLICATION

This application claims the benefit of U.S. Provisional Application No. 61/360,904, filed Jul. 1, 2010 and titled SYSTEMS AND METHODS FOR PERMISSION ARBITRATED TRANSACTION SERVICES, the disclosure of which is hereby incorporated by reference in its entirety into this application.

### BACKGROUND

This disclosure generally relates to accessing personal information, and more particularly to systems and methods for permission arbitrated transaction services relating to personal information.

### BRIEF DESCRIPTION OF THE DRAWINGS

Specific embodiments will now be described with reference to the following drawings.

FIG. 1 illustrates one embodiment of a block diagram of a computer system for arbitrating access to personal information.

FIGS. 2A-2C are flowcharts illustrating an embodiment of a method of arbitrating access to personal information: FIG. 2A illustrates a first portion of the method, based on an initiation by a requesting party, FIG. 2B illustrates the first portion of the method based on an initiation by a permitting party, FIG. 2C illustrates a second portion of the embodiment of a method of arbitrating access to personal information.

FIG. 3 illustrates one embodiment of the permission based transaction services system and the flow of data between the entities when a rental screening service is arbitrated.

FIG. 4 illustrates another embodiment of the permission based transaction services system and the flow of data between the entities when a social networking service is arbitrated.

### DESCRIPTION OF THE EMBODIMENTS

The terminology used in the description presented herein is not intended to be interpreted in any limited or restrictive manner, simply because it is being utilized in conjunction with a detailed description of certain specific embodiments of the invention. Furthermore, embodiments of the invention may include several novel features, no single one of which is solely responsible for its desirable attributes or which is essential to practicing the inventions described herein.

#### Example Computing System

In some embodiments, the systems, computer clients and/or servers described below take the form of a computing system as shown in FIG. 1. FIG. 1 is a block diagram showing an embodiment in which the computing system 100 is in communication with a network 160 and various systems are also in communication with the network 160. The computing system 100 may be used to implement systems and methods described herein. For example, the computing system 100 may be configured to receive requests for personal information and generate outputs corresponding to the type of information requested. In some embodiments, the system is

accessed remotely by a client, the system is local to the client, and/or a combination of the two. One example client may be an individual or a business that uses the systems and methods to request access to another individual's personal information, such as information that is indicative of character attributes of the individual.

The terms "individual," "consumer," "customer," "people," "persons," "party," "entity," and the like, whether singular or plural, should be interpreted to include either individuals or groups of individuals, such as, for example, married couples or domestic partners, organizations, groups, business entities, and other entities.

The computing system 100 includes, for example, a personal computer that is IBM, Macintosh, or Linux/Unix compatible. In one embodiment, the computing system 100 comprises a server, a laptop computer, a cell phone, a personal digital assistant, a kiosk, or an audio player, for example. In one embodiment, the exemplary computing system 100 includes a central processing unit (CPU) 105, which may include a conventional microprocessor. The computing system 100 further includes a memory 130, such as random access memory (RAM) for temporary storage of information and a read only memory (ROM) for permanent storage of information, and a mass storage device 120, such as a hard drive, diskette, or optical media storage device. Typically, the modules of the computing system 100 are connected to the computer using a standard based bus system 180. In different embodiments, the standard based bus system 180 could be Peripheral Component Interconnect (PCI), Microchannel, Small Computer System Interface (SCSI), Industrial Standard Architecture (ISA) and Extended ISA (EISA) architectures, for example. In addition, the functionality provided for in the components and modules of the computing system 100, which is also referred to herein as the permission arbitrated transaction services system 100 or simply the PATS system 100, may be combined into fewer components and modules or further separated into additional components and modules.

The computing system 100 is generally controlled and coordinated by operating system software, such as Windows 95, Windows 98, Windows NT, Windows 2000, Windows XP, Windows Vista, Unix, Linux, SunOS, Solaris, or other compatible operating systems. In Macintosh systems, the operating system may be any available operating system, such as MAC OS X. In other embodiments, the computing system 100 may be controlled by a proprietary operating system. Conventional operating systems control and schedule computer processes for execution, perform memory management, provide file system, networking, I/O services, and provide a user interface, such as a graphical user interface (GUI), among other things.

The exemplary computing system 100 includes one or more commonly available input/output (I/O) devices and interfaces 110, such as a keyboard, mouse, touchpad, and printer. In one embodiment, the I/O devices and interfaces 110 include one or more display device, such as a monitor, that allows the visual presentation of data to a user. More particularly, a display device provides for the presentation of GUIs, application software data, and multimedia presentations, for example. The computing system 100 may also include one or more multimedia devices 140, such as speakers, video cards, graphics accelerators, and microphones, for example.

In the embodiment of FIG. 1, the I/O devices and interfaces 110 provide a communication interface to various external devices. In the embodiment of FIG. 1, the computing system 100 is electronically coupled to a network 160, which comprises one or more of a LAN, WAN, or the Internet, for

example, via a wired, wireless, or combination of wired and wireless, communication link **115**. The network **160** communicates with various computing devices and/or other electronic devices via wired or wireless communication links.

In addition to the devices that are illustrated in FIG. **1**, the network **160** may communicate with other data sources or other computing devices. In addition, the data sources may include one or more internal and/or external data sources. In some embodiments, one or more of the data structures or data sources may be implemented using a relational database, such as Sybase, Oracle, CodeBase and Microsoft® SQL Server as well as other types of data structures such as, for example, a flat file data structure, an entity-relationship data structure, and object-oriented data structure, and/or a record-based data structure.

In the embodiment of FIG. **1**, the computing system **100** is coupled to a secured network **160**, such as a secured LAN, for example. The system communicates with the internal data structure(s) **172** and external data structure(s) **173**. In some embodiments, the system **100** may communicate with the internal data structure **172** via a secured network **161**, such as a secured LAN. In some embodiments, the internal data structure(s) **172** and the external data structure **173** may be configured to communicate with additional computing devices over the networks **160**, **161** and/or some other network, such as a LAN, WAN, or the Internet via a wired, wireless, or combination of wired and wireless, communication link.

In the embodiment of FIG. **1**, the computing system **100** also includes a permission arbitrated transactions services (“PATS”) module **150** that may be executed by the CPU **105**. For example, the computing system **100** may be configured to execute the PATS module **150**, among others, in order to provide information based on data in internal data structure(s) **172** and/or external data structure(s) **173**, as explained in further detail below. The sources of the data accessed may include consumer information available to a credit bureau such as credit profile data, demographic data, marketing data, credit scores, marketing scores, behavioral scores, inferred data, and the like, and any third party data to which the credit bureau may have access. The sources of data may also include consumer-provided data such as preferences, interests, affinity, desires, behavioral data, transactional data such as purchases, and any other self-defined or personally created data. In various embodiments, such data may be available on one or more of the internal data structure(s) **172** and/or external data structure(s) **173**.

FIG. **1** also illustrates a requesting party **164** that is in communication with the network **160**. The requesting party may be any entity that desires information regarding another entity. For example, a landlord may be a requesting party that desires information regarding potential tenants. In one embodiment, the computing system **100** provides an arbitration service between requesting parties and parties from which personal information is requested. For example, the requesting party **164** may request data related to another entity (a permitting party **190**). The permitting party **190** may provide permission to the computing system **100** to grant the requesting party **164** access to certain information regarding the permitting party. As another example, the permitting party **190** may provide permission to the computing system **100** to make information available to a receiving party **184**, without the receiving party **184** first requesting access to the information. Thus, the permitting party **190** can selectively allow personal information to be provided to various entities in response to specific requests for information (e.g., in response to a request from the requesting party **164**) or without requests from parties (e.g., information may be made available to the

requesting party **164**). In various embodiments, some of the parties **164**, **184** and **190** may overlap with one another. In various embodiments, the receiving party **184** may include various types of entities. For example, the receiving party **184** may also be the permitting party **190** (for example, a consumer may provide authorization rules that permit sending of personal information to the consumer on a periodic basis), a third party distinct the permitting party **190**, a credit bureau, an information service provider, a financial institution, or a party that stores and maintains personal information on the permitting party **190**. Depending on the embodiment, the parties **190**, **164** and **184** may be unknown/anonymous to each other. In yet other embodiments, the parties **190**, **164** and **184** may be partially known to each other, such as through a user name or a screen name on a social networking site, or a URL name, for example. In general, the word “module,” as used herein, refers to logic embodied in hardware or firmware, or to a collection of software instructions, possibly having entry and exit points, written in a programming language, such as, for example, Java, Lua, C or C++. A software module may be compiled and linked into an executable program, installed in a dynamic link library, or may be written in an interpreted programming language such as, for example, BASIC, Perl, or Python. It will be appreciated that software modules may be callable from other modules or from themselves, and/or may be invoked in response to detected events or interrupts. Software instructions may be embedded in firmware, such as an EPROM. It will be further appreciated that hardware modules may be comprised of connected logic units, such as gates and flip-flops, and/or may be comprised of programmable units, such as programmable gate arrays or processors. The modules described herein are preferably implemented as software modules, but may be represented in hardware or firmware. Generally, the modules described herein refer to logical modules that may be combined with other modules or divided into sub-modules despite their physical organization or storage.

It is recognized that the term “remote” may include data, objects, devices, components, and/or modules not stored locally, that is not accessible via the local bus. Thus, remote data may include a device which is physically stored in the same room and connected to the computing system via a network. In other situations, a remote device may also be located in a separate geographic area, such as, for example, in a different location, country, and so forth.

In one embodiment, the computing system **100** may allow a user, also referred to as the permitting party **190**, to share the user’s personal information with another party, such as the receiving party **184**. The receiving party **184** may then use the information to authenticate the permitting party **190**, assess information associated with the permitting party **190**, determine if the permitting party **190** is compatible with one or more other users associated with the receiving party **184**, validate the permitting party **190**, and so forth. The permitting party **190** may define how much of the permitting party **190**’s personal information is shared, and/or limit the use of the information for one or more specific purposes. Personal information may include any information associated with an entity, such as information that may be used for purpose of one or more of authentication, assessment, compatibility, legitimacy and validation. Requesting parties and/or receiving parties may also request, and be provided access to via the computing system **100**, non-personal aggregate attributes, such as for the purpose of enabling the use of summarized attributes in areas such as website advertising, for example.

Similarly, a requesting party **164** may set up criteria for the types of information it wants to review along with the

intended use of the information. The requesting party **164** may also provide a system that enables permitting parties **190** the ability to grant the requesting party **164** access to the requested information. This access may be direct or via a gateway.

As one example, a requesting party **164** may be the Smith family, which is looking to hire a home nurse to watch over the family's aging grandmother. The Smith family can then decide that it would like to review credit information, criminal background information, and general demographic information of potential home nurse applicants. One such potential home nurse applicant may be Jane Jones. The Smith family may provide information to the computing system **100**, and more particularly, to the PATS module **150**, requesting certain personal information regarding Jane Jones. For example, the Smith family may access a website that is controlled by the provider of the PATS module **150** in order to provide a request for information regarding Jane Jones. The requested may be provided via any available user interface elements, and may include various options for payment for provision of the personal information. Alternatively, the request for information regarding an individual may be communicated to the computing system **100** in any other manner, such as via SMS message, email message, phone call, letter, or other. In this embodiment, Jane Jones, a home health nurse, who is looking for a new patient, is the permitting party **190**, that is provided an opportunity to permit the Smith family (the requesting party **164**) to access certain of her personal information. In one embodiment, Ms. Jones is notified of a request for personal information in one or more of various manners, such as an SMS message, email message, letter, phone call, or an alert in an online portal, such as a credit monitoring portal of which Mr. Jones is a member. Thus, Jane Jones can utilize the system **100** to permit the Smith family to review her personal information, and the Smith family can use the system **100** to determine that Jane Jones is looking for a new patient, receive information verifying whether Jane Jones is who she says she is, and receive information from the computing system **100** about Jane Jones' credit history, criminal background and/or any other requested information.

As another example, nurse Jack Brown may be another nurse looking for potential patients to take care of. As the permitting party **190**, Jack Brown may provide information to the computing system **100**, and more particularly, to the PATS module **150**, indicating agreement to make certain of his personal information, such as his credit history and criminal background information, available to certain receiving parties **184**, which may be families looking to hire a home nurse. Thus, Jack Brown can utilize the system **100** to permit receiving parties **184** to review his personal information. One such family, the Doe family, which is qualified as a receiving party **184** based on criteria provided by Jack Brown (the permitting party **190**), can access information over a network **160** to determine that Jack Brown is looking for a new patient and receive information from the computing system **100** about Jack Brown's credit history and criminal background.

Credit data as well as public records, demographics such as, for example, age, and aggregated attributes relating to credit data may be enabled for scalable distribution into digital and non-digital platforms. Permission arbitrated transaction services systems and methods disclosed herein may enable such scalable distribution through various web properties, utilizing permission-based handshakes, an open web framework and/or architecture, transformation layers and authentication rules. Website developers or others may utilize an API/SDK framework to write to the computing system **100**. Such a PATS system **100** may accept common request and delivery types such as XML (world-wide web), SMS (mobile technology), and the like, over secure channels (such as https for example), using common web services (such as REST and SOAP, for example).

Embodiments of the permission arbitrated transaction services systems and methods may leverage a variety of possible interactions between parties to present potential opportunities for character and personal assessment between two or more parties **164**, **184** and **190**. Some example interactions include tenant screening, social networks and matchmaking, hiring and employment, electronic exchanges, searching for caregivers, client screening, background checks. Credit data as well as public records, demographics such as, for example, age, and aggregated attributes relating to credit data may be transformed, using the permission arbitrated transaction services ("PATS") system **100**, into a broad consumable language where required, in order to provide parties with new standards for assessment of other parties' character, compatibility, employability, and the like. In various embodiments, the PATS system may be operated by a credible and trusted entity acting as an arbitrator between the various parties. In some embodiments, the PATS system may be operated by a credit bureau.

Some embodiments of the permission arbitrated transaction services systems and methods may also enable entities, such as small business owners, with a simplified mechanism for accessing personal information of entities. Typically, business owners undergo extensive verification processes (including site visits for example) in order to be authorized to access credit data. The permission arbitrated transaction services may speed up this process by performing the necessary validation electronically and/or online in real-time to allow the small business owners quicker access to credit data.

Embodiments of the PATS system **100** may be implemented as a data-as-a-service model. Such a model includes standardized processes for accessing data "where it lives"—the actual platform on which the data resides does not matter. For data-as-a-service, the consumption of resources may be determined by the buyer/customer/user on an as-needed basis, and may utilize web services or cloud computing. Applications and methods of access to a data-as-a-service model may vary depending on the type of information requested, primarily due to statutory requirements and governing regulations relating to the information.

The table below lists some of the potential features of a PATS system **100**.

TABLE 1

Market	Major Features	Platform	Client		
			Interface	Server	Pricing Model
US Consumers/Businesses digital networks, social networks, employment sites,	Data-as-a-service platform and application layer(s) to enable aggregated statistics	Web services/custom solutions	Browser application and/or XML	Web server	Transaction and Revenue Share

TABLE 1-continued

Market	Major Features	Platform	Client Interface	Server	Pricing Model
match making sites, and similar	and permission actuated access for assessments of authentication, legitimacy, and character/background (P2P, B2C, Web)		integration		

FIG. 2 (FIGS. 2A, 2B, and 2C) is a flowchart illustrating one embodiment of a method of arbitrating access to personal information of a permitting party. Depending on the embodiment, the method of FIG. 2 may include fewer or additional blocks and/or the blocks may be performed in a different order than is illustrated. Software code configured for execution on a computing device in order to perform the method of FIG. 2 may be provided on a computer readable medium, such as a compact disc, digital video disc, flash drive, or any other tangible medium. Such software code may be stored, partially or fully, on a memory device of the computer, such as the memory 130 (FIG. 1), in order to perform the method outlined in FIG. 2. For ease of explanation, the method will be described herein as performed by a PATS system 100; however, the method may be performed by any other suitable computing device.

FIG. 2A illustrates a first portion of the method, based on an initiation by a requesting party 164. Beginning in block 210, the PATS system 100 receives a request for account creation by a requesting party 164. In various embodiments, the request for account creation may include information about the requesting party 164 including one or more of: a name, an address, a date of birth, a driver's license number, a social security number, employer name, tax identification number, phone number, and the like. If the requesting party 164 has already established an account with the PATS system 100, block 210 may be simplified such that the requesting party 164 provides login/authentication information. For example, the requesting party 164 may provide a username and password that is usable by the PATS system 100 to identify the particular requesting party.

Next, in block 220, the PATS system 100 receives a selected purpose from the requesting party 164. In various embodiments, the selected purpose may be one or more of compatibility, assessment, authentication, legitimacy, validation, and the like. In one embodiment, the requesting party 164 establishes a default purpose for requesting personal information of other entities, such that block 220 may be skipped in requests for personal information by that particular requesting party 64. For example, a landlord may select a default purpose of determining credibility that should be used with subsequent request for personal information by the landlord using the PATS system 100.

Moving to block 230, the PATS system 100 may optionally receive an additional purpose. In various embodiments, the additional purpose may be that the data be used only for social networking purposes, for rental screening purposes, and the like. Additionally, the system 100 may receive details such as when the data is needed (for example, as a one-time transaction or as part of batch processing) and whether the data should be transformed in any way. In some embodiments, the requesting party 164 can provide preferences for one or more of the above tasks in blocks 220 and 230 such that those tasks may be automated using the requesting party 164's default preferences. Thus, blocks 220 and 230 may not be individually performed for each request from a requesting party 164.

Next, in block 240, the PATS system 100 ensures that the requesting party 164 complies with and accepts any legal requirements for customer responsibility. Such requirements may include one or more of: obtaining acceptance and an electronic signature from the requesting party 164, receiving payment details such as credit card information from the requesting party 164, or other legal consent information. The requesting party 164 may be asked by the system 100 to provide evidence of written instruction. Such written instruction may include an electronic signature as defined by the ESIGN Act, or any other method that governing bodies may approve as adequate proof.

The PATS system 100 may then use the payment details to process payment for the account creation fee. In some embodiments, the payment model for the PATS system 100 may be transactional. In other embodiments, it may be by batch. The payment method may be by credit, by debit, by PayPal™ account, and the like. Payment for a transaction may be received from the requesting party 164, from the permitting party 190, or both.

Next, in block 250, the PATS system 100 verifies whether there may be identity theft or some other form of fraud, based on the information received by the requesting party 164. The parties' identities may be verified using a variety of authentication and fraud detection techniques by the PATS system 100. Regardless of the result of this verification, the PATS system 100 may store the details of the transaction(s) with the requesting party 164 in a device such as mass storage device 120, for example, in order to enable comprehensive tracking of each transaction. The requesting party 164 may also be asked to affirmatively accept or reject clear and conspicuous instructions to support, defend or refute that the transaction was requested. Details of the transaction(s) may include IP address, transaction time, originating source (for example, member number, third party website/partner, and reseller identification), data with respect to the requesting party 164's actions (such as, for example, obligation and responsibilities acceptance, e-signature, and acknowledgments of instructions).

If the PATS system 100 detects identity theft or fraud, then, at block 252, the system 100 may request a fax of personally identifiable information from the requesting party 164, and any other information relating to the additional purpose received at block 230. If the system 100 receives such information (the system 100 may or may not receive such requested information) from the requesting party 164, then at block 254, the information is reviewed, and if the information is verified, the method continues to block 260. In one embodiment, if the information is verified (e.g., the requesting party is authenticated), a message with a traceable and/or encrypted message and/or link may be sent to the requesting party 164's location (which may be, for example, an email address, a social networking username, and/or a mobile phone reached by an SMS), where the link is usable to continue with the request for personal information. If the system 100 determines that the requesting party 164 cannot be authenticated

based on the received information, or if personally identifiable information is not received, the method continues to block 256 where follow up with the requesting party 164 using standard membership processes for suspicious account handling may be performed.

If the PATS system 100 does not detect identity theft or fraud at block 250, or if there was a suspicion of theft or fraud but the personally identifiable information was verified at block 254, then, at block 260, the system 100 may receive information regarding the targeted permitting party 190 from the receiving party 164, as well as the type of product to request regarding the permitting party 190. In various embodiments, the information regarding the permitting party 190 may include one or more of the permitting party 190's email address, name, address, date of birth, driver's license number, employer name, income, and the like. In various embodiments, the type of information regarding the permitting party 190 that is requested may include one or more of: a credit score, a credit profile with a decision, a full credit profile with personally identifiable information removed, a credit profile with some information removed, information regarding the character of permitting party 190, and the like. In some embodiments, the authentication blocks 210-250 may be performed in another manner, possibly by another entity that specializes in authentication. Authentication performed by the PATS system 100 and/or the other entity may include one or more of several authentication techniques known to one skilled in the art. Thus, in some embodiments, a process of requesting personal information of an entity that is executed by the PATS system 100 begins with block 260 of FIG. 2A.

Next, at block 270, the PATS system 100 may use the details regarding the permitting party 190 to contact the permitting party 190. In some embodiments, the PATS system 100 may have access to further contact information regarding the permitting party 190 that may not be available to the requesting party 164. For example, the requesting party 164 may not have an e-mail address of the permitting party 190, but the PATS system 100 may determine the e-mail address of the permitting party 190 and communicate with the permitting party 190 via the e-mail address. For example, in a social networking scenario, the PATS system 100 may request and receive contact information of the permitting party from the social networking system, where the contact information is not available to requesting party 164. When the PATS system 100 communicates with the permitting party 190, information that at least partially identifies the requesting party 164 and details regarding the request are provided. In one embodiment, the permitting party 190 may initiate acceptance of the request by the requesting party 164, for example, by clicking an encrypted link, if received by email. In this way, the permitting party 190 may authorize or reject the request for information. In other embodiments, the permitting party may authorize/reject requests for access to personal information in any other manners, such as via a web interface, telephone call, email, or other means.

Next, at block 275, the permitting party 190 the permitting party may be given the ability to provide authorizations after being informed of a specific request for access to their information. The permitting party 190 may provide authorization to the system 100 for the requesting party 164 in any number of ways (including those discussed above). In some embodiments, the permitting party 190 may select portions of the requested information that the requesting party 164 is authorized to access.

In one embodiment, the permitting party 190 is also required to have an account with the PATS system 100, such

as to authenticate that the permitting party really is the entity that the requesting party is seeking information from. Thus, the permitting party 190 may need to provide authentication information to the PATS system. For example, if the permitting party 190 has not previously set up an account with the PATS system 100, blocks 210-250, and if necessary, blocks 252-258, may be repeated for the permitting party 190. Depending on the embodiment, authentication of the permitting party 190 may be different than the required authentication for the requesting party 164. For example, the permitting party 190 may not need to provide as much authentication information as the requesting party 164, or vice versa.

During the set up of the account for the permitting party, or for a previously set-up account, the permitting party 190 may be asked at block 260 to provide permission for access to personal information, and to determine the type of information to make available to the requesting party 164. In various embodiments, the types of information available for request by the requesting party, and available to allow access to by the permitting party 190, may include one or more of: a credit score, a credit profile with a decision, a full credit profile with personally identifiable information removed, a credit profile with some information removed, and the like. Next, the method moves to block 280 (FIG. 2C) described further below.

FIG. 2B illustrates the first portion of the method based on an initiation by a permitting party 190, where personal information is to be made available to one or more receiving parties 184. Beginning in block 210, the PATS system 100 receives a request for account creation by a permitting party 190. In various embodiments, the request for account creation may include information about the permitting party 190 including one or more of: a name, an address, a date of birth, a driver's license number, a social security number, employer name, tax identification number, phone number, and the like.

Next, in block 220, the PATS system 100 receives a selected purpose from the permitting party 190. In various embodiments, the selected purpose may be one or more of compatibility, assessment, authentication, legitimacy, validation, and the like. In some embodiments, the PATS system 100 may also receive information from the permitting party 190 identifying one or more receiving parties 184 for which information may be made available. In other embodiments, the system 100 may receive information from the permitting party 190 identifying receiving parties 184 for which information may be restricted from being available.

Moving to block 230, the PATS system 100 may optionally receive an additional purpose. In various embodiments, the additional purpose may be that the data be used only for social networking purposes, for rental screening purposes, and the like. Additionally, the system 100 may receive details such as when the data is needed (for example, as a one-time transaction or as part of batch processing) and whether the data should be transformed in any way. In some embodiments, the permitting party 190 can provide preferences for one or more of the above tasks in blocks 220 and 230 such that those tasks may be automated using the permitting party 190's default preferences.

Next, in block 240, the PATS system 100 ensures that the permitting party 190 complies with and accepts any legal requirements for customer responsibility. Such requirements may include one or more of: obtaining acceptance and an electronic signature from the permitting party 190, receiving payment details such as credit card information from the permitting party 190, or other legal consent information. The permitting party 190 may be asked by the system 100 to provide evidence of written instruction. Such written instruc-

tion may include an electronic signature as defined by the ESIGN Act, or any other method that governing bodies may approve as adequate proof.

Then, in block **245**, the PATS system **100** receives details about the type of information for which permission is granted by the permitting party **190** for the receiving part(ies) **184**. In various embodiments, the type of product may include one or more of: a credit score, a credit profile with a decision, a full credit profile with personally identifiable information removed, a credit profile with some information removed, and the like.

Next, in block **250**, the PATS system **100** verifies whether there may be identity theft or some other form of fraud, based on the information received by the permitting party **190**. The parties' identities may also be verified using a variety of authentication and fraud detection techniques by the PATS system **100**. Regardless of the result of this verification, the PATS system **100** may store the details of the transaction(s) with the permitting party **190** in a device such as mass storage device **120**, for example, in order to enable comprehensive tracking of each transaction. The permitting party **190** may also be asked to affirmatively accept or reject clear and conspicuous instructions to support, defend or refute that the transaction was requested. Details of the transaction(s) may include IP address, transaction time, originating source (for example, member number, third party website/partner, and reseller identification), data with respect to the permitting party **190**'s actions (such as, for example, obligation and responsibilities acceptance, e-signature, and acknowledgments of instructions).

If the PATS system **100** detects identity theft or fraud, then, at block **252**, the system **100** may request a fax of personally identifiable information from the permitting party **190**, and any other information relating to the additional purpose received at block **230**. If the system **100** receives such information from the permitting party **190**, then at block **254**, the information is reviewed, the method continues to block **260**. In one embodiment, if the information is verified (e.g., the permitting party is authenticated), a message with a traceable and/or encrypted message and/or link may be sent to the permitting party **190**'s location (which may be, for example, an email address, a social networking username, and/or a mobile phone reached by an SMS), where the link is usable to further define details regarding access to the permitting party **190**'s personal information. If the system **100** determines that the permitting party **190** cannot be authenticated based on the received information, or if personally identifiable information is not received, the method continues to block **256** where follow up with the permitting party **190** using standard membership processes for suspicious account handling may be performed.

If the PATS system **100** does not detect identity theft or fraud at block **250**, or if there was a suspicion of theft or fraud but the personally identifiable information was verified at block **254**, then, at block **265**, the PATS system **100** may use the payment details to process payment for the account creation fee, and/or for providing a product to a receiving party **184**. In some embodiments, the payment model for the PATS system **100** may be transactional. In other embodiments, it may be by batch. The payment method may be by credit, by debit, by PayPal™ account, and the like. Payment for a transaction may be received by the requesting party **164**, by the permitting party **190**, or both. In some embodiments, the authentication blocks **210-250** may be performed in another manner, possibly by another entity that specializes in authentication. Thus, in some embodiments, a process of permitting

use of personal information of an entity that is executed by the PATS system **100** begins with block **265** of FIG. 2B.

Next, at block **270**, the PATS system **100** may contact one or more receiving party **184**. In some embodiments, the PATS system **100** may have access to further contact information regarding the receiving party **184** that may not be available to the permitting party **190**. For example, the permitting party **190** may not have an e-mail address of the receiving party **184**, but the PATS system **100** may determine the e-mail address of the receiving party **184** and communicate with the receiving party **184** via the e-mail address. For example, in a social networking scenario, the PATS system **100** may request and receive contact information of the receiving party from the social networking system, where the contact information is not available to permitting party **190**.

In one embodiment, the receiving party **184** is also required to have an account with the PATS system **100**, such as to authenticate that the receiving party really is the entity to whom the permitting party has provided permission to access information. Thus, the receiving party **184** may need to provide authentication information to the PATS system. For example, if the receiving party **184** has not previously set up an account with the PATS system **100**, blocks **210-250**, and if necessary, blocks **252-258**, may be repeated for the receiving party **184**. Depending on the embodiment, authentication of the receiving party **184** may be different than the required authentication for the permitting party **190**. For example, the receiving party **184** may not need to provide as much authentication information as the permitting party **190**, or vice versa.

FIG. 2C illustrates a second portion of the embodiment of a method of arbitrating access to personal information. Once the PATS system **100** has contacted the permitting party and received further authorizations if necessary at block **275** (FIG. 2A) or the receiving party at block **270** (FIG. 2B), then at block **280**, the PATS system **100** performs a data structure inquiry to obtain the information requested by the requesting party **164** for which the permitting party **190** authorized access by the requesting party **164**. In various embodiments, this data structure enquiry may include accessing data in internal credit data structure(s) **172** and/or one or more external data structure(s) **173**.

Next, at block **285**, the PATS system **100** generates credit bureau data, credit attributes, and/or transformation of such data in order to generate the a product including the information requested and/or permitted at blocks **245** or **260**. In one embodiment, personal information is grouped into various products that may be authorized for release to requesting and/or permitting parties. For example, a credit report product may include the typical pieces of credit information, and information associated with the credit information, that is provided to consumers in credit reports. The type of information requested by a requesting party **164**, and/or permitted by the permitting party **190** may vary. In some embodiments, the information may be, for example, header information included in a typical credit bureau report, which may be used for authentication. In other embodiments, the information may be, for example, a credit bureau profile, which may include the full profile, some credit scores, some credit attributes, and/or abstractions of the score and/or attributes.

In some embodiments, the information provide to requesting and/or receiving parties may be transformed from its original format. For example, an abstract representation of a credit score or decision may be rendered in the form of an expression, such as an icon that ranges from a smile to a frown, wherein the expression is representative of the credit score. For example, expressive face icons may be associated with credit score ranges so that a credit scores in the range of

780-820, for example, may be associated with a smiley face icon while credit scores in the range of 300-600 may be associated with a frowny face. Expressions may also include common connotations such as number of stars or degrees of moon fullness. Additionally, embodiments in the form of

low-to-high scores and decisions may be abstracted in quantitative progressions, ranges and volumes and can be rendered as gauges, thermometers, speedometers and other meters, as well as in common chart formats such as pie charts, bar charts and sliders.

In yet other embodiments, the information may be demographics such as age, sex, location, and so forth. In some embodiments, the information may be education records. In other embodiments, the information may be public records such as liens and lawsuits, for example. In other embodiments, the information may be criminal records. In other embodiments, the information may include some other form of data and/or transformations of the other types of information listed above.

If the request for data comprises a soft inquiry, the permitting party **190** may acknowledge that they are sharing the result with the requesting party **164**, and a transformed result (such as a score, for example, indicating a consumable grade such as "excellent") may be provided. If the request comprises a hard inquiry, the permitting party **190** may provide written authorization to the system **100** and by proxy to the requesting party **164**. Such written authorization may need to conform to electronic standards for providing written authorization. A transformed result (such as a score for example, indicating a consumable grade such as "excellent") may be provided. In some embodiments, the information generated at block **285** may be provisioned to a location (for example, a secure server, an encrypted file mailbox, an access point, a message, or the like).

Finally, at block **290**, the PATS system **100** may contact the requesting party **164**, or the receiving party **184** to alert that they are authorized to access the generated information. In various embodiments, the system **100** may notify (for example, by encrypted email, or by short message service (SMS) message, or the like) the party that the information is available; require the party to acknowledge their obligations under law, if required, by affirming the singular purpose for the receipt of the information. The PATS system **100** may then allow the party to access the information at the provided location. In some embodiments, the access to the generated file (for example, the party's credit report) may be limited in time. The time limit may be 24 hours, or some other time limit that agreeably reduces the established and standard risk parameters.

The output provided by the PATS system **100** may depend on the type of service for which information is requested. FIG. 3 illustrates one embodiment of the permission based transaction services system and the flow of data between entities for tenant screening purposes. As seen in FIG. 3, for tenant screening services, (1) the landlord **364**, as the requesting party, sends a request to the PATS system **100** via the network **160** for information regarding a potential tenant (e.g., a credit report of a potential tenant, Joan Doe). Then, (2) the PATS system **100** contacts, via the network **160**, a potential tenant, as a permitting party **190**, to receive permission to send information regarding the potential tenant **390** to the landlord **364**. Then, (3) the potential tenant **390**, via the network **160**, provides permission to the PATS system **100** to send or otherwise provide access to the information to the landlord **364**. The potential tenant **390** may decide to provide no or a limited amount of the requested information. For example, the potential tenant **390** may authorize the landlord

**364** to access only a credit report including Personal Information, Profile Summary, Score Summary, Public records, or an extract of the credit report and score, and/or a decision. For example, the PATS system **100** may include, or may have access to logic provided by another entity, to analyze certain personal information of the potential tenant and provide an indicator of a recommended decision for the landlord **364**, such as, for example, approve, refer, and/or decline based on the property manager's established parameters. Such decision logic may have various options for customization by the landlord **364**, such as based on the landlords willingness to risk entering into an agreement with an unsuitable tenant. In one embodiment, the PATS system **100** may suppress certain personally identifiable information of the tenant **390** (either by default or by specific request by the potential tenant **390**), such as social security number and detailed tradeline data from being returned in the output to the landlord **364**. Based on the permissions authorized by the potential tenant, in step (4) the PATS system **100** returns to the landlord **364** only the information permitted by the potential tenant **390**.

The example of FIG. 3 also illustrates authentication steps (labeled with "A") between the PATS system **100** and both of the potential tenant **390** and the landlord **364**. As discussed above, some level of authentication of both the permitting party and the requesting party may be required. Various authentication techniques may be used, such as those illustrated and discussed with reference to FIG. 2. Authentication may occur prior to steps 1-4 discussed above and/or at other points between or during completion of the steps. For example, the landlord **364** may need to provide authentication information before providing the request for the credit report of Joan Doe, and may be required to again provide authentication information after permission has been granted by Joan Doe and prior to accesses the information.

In another embodiment, such as for example for hiring and employment services, the data output may include a credit report including Personal Information, Profile Summary, Score Summary, Public Records, or an extract of the credit report, and a credit score, and/or a decision (such as for example, hire, do not hire, based on the employer's established parameters). In some embodiments, the output may include only a credit score, or a transformation of a credit score into another abstraction.

FIG. 4 illustrates another embodiment of the permission based transaction services system and the flow of data between the entities when a social networking service is arbitrated. As seen in FIG. 4, for social networking services, (1) a social networker, such as for example Jack Brown, as a permitting party **490**, sends permission to the PATS system **100** via the network **160** to share information regarding his age, or other demographic information with other social networkers which may be seeking a social networker to match some criteria. The social networker **490** may decide to provide no or a limited amount of information. For example, the social networker **490** may authorize other seeking social networkers, as receiving parties **484**, to only receive the information transformed from its original format, such as an indication of the other social networker's compatibility with Jack Brown. Then, (2) the PATS system **100**, via the network **160**, may receive from a social networking seeker **484**, such as Jill Stone, some criteria of interested age or demographics of Jack Brown. For example, Jill may ask request an age check, and may submit a parameter such as "age between of 18-25" for Jack, also request to know Jack's credit score, and possibly an indication of compatibility with Jack. The PATS system **100** may then (3) send, via the network **160**, information regarding the social networker **490**, Jack Brown. In one embodi-



ment, Personally Identifiable Information (including for example name, address, phone number, Social Security Number, and/or Driver's License Number), Score Summary, Profile Summary, or Detailed Tradeline data is not delivered to Jill. In some embodiments, the output may include a match-  
 5 ing capability in which receiving parties receive a "yes/no" match to the parameters or criteria they enter. The response from the PATS system **100** at **(3)** may be "Yes" if Jack's profile includes Age of 18-25, "No" if not between 18-25, and "N/A" if unknown. Another example may include a request  
 10 for compatibility (e.g., financial or social compatibility) where Jill submits a parameter of "excellent" credit to be matched, and the PATS system **100** returns a smiley face, wherein the smiley face is representative of Jack's credit score or possibly an indication of a match between Jack's  
 15 personal information (e.g., Jack's credit score or some information derived from Jack's personal information, such as a financial stability indication) and criteria provided by Jill Stone.

The example of FIG. **4** also illustrates authentication steps (labeled with "A") between the PATS system **100** and both of the social networkers **490** and **484**. As discussed above, some level of authentication of both the permitting party and the receiving party may be required. Various authentication techniques may be used, such as those illustrated and discussed  
 20 with reference to FIG. **2**. Authentication may occur prior to steps **1-3** discussed above and/or at other points between or during completion of the steps.

In another embodiment, for search of caregiver services, the data output may include a consumer report including Personal Information, Score Summary, and/or Public Records. The permission arbitrated transaction services system may suppress information such as the party's social security number and detailed Tradeline data from being returned in the output. In some embodiments, the output may include  
 25 a transformation of a credit score into another abstraction (such as, for example a red, yellow or green symbol or icon), and/or a transformation of public records into another abstraction (such as for example, red, yellow or green symbol or icon).

In another embodiment, for electronic exchanges, the output may comprise authentication, credit and public record data that is returned in transformed format.

Embodiments of the permission arbitrated transaction services systems and methods disclosed herein may also provide a framework in which commercial parties such as developers, application engineers, and the like, build independent applications and services leveraging the PATS system **100** data, and the commercial parties may deliver those applications  
 30 and services to their customers.

Embodiments of the permission arbitrated transaction services systems and methods disclosed herein may comprise a component based framework developed to meet the needs and opportunities of a multitude of international markets, localized for regulatory rules. For example, the framework may be developed for the United States market in compliance with the Fair Credit Reporting Act (FRCA). The framework may also be developed for the United Kingdom, for example,  
 35 in compliance with the Data Protection Act (DPA).

The permission arbitrated transaction services systems and methods disclosed herein may support credit bureau businesses and websites, personal connection websites (such as Facebook, MySpace, and the like), matchmaking sites (such as eHarmony®, match.com®, and the like), employment-relates sites (such as LinkedIn®, ZoomInfo, and the like),  
 40 people search sites (such as RapLeaf, Pipl, and the like), communications services (such as Skype™, and the like),

mobile telephony platforms, tenant screening companies, credit reporting companies, and/or other businesses to enable two or more people or entities to exchange personal information in an arbitrated, secure manner, quickly, easily and  
 5 safely.

The systems and methods disclosed herein may also support doctors, lawyers, small retailers, and other parties wishing to initiate permissible purpose requests for credit or other related variables for purposes of making business decisions.

Some of the contemplated benefits of some embodiments of permission arbitrated transaction services systems and methods include the ability to provide end users with assessment of their connections before getting too involved with them in a fast, inexpensive and reliable manner; the ability to  
 15 provide delivery channel partners with a complementary value add service to their constituents as well as an additional source of revenue; the ability to provide credit bureaus with scaled enablement for distribution of credit data, collection of proof of life data on consumers, additional revenue sources, leveraging of other business assets.

## SUMMARY

All of the processes described above may be embodied in, and fully automated via, software code modules executed by one or more general purpose computers. The code module may be stored in any type of tangible computer-readable medium or other computer storage device. A tangible computer readable medium is a data storage device that can store  
 25 data that is readable by a computer system. Examples of computer readable mediums include read-only memory, random-access memory, other volatile or non-volatile memory devices, CD-ROMs, magnetic tape, flash drives, and optical data storage devices. Some or all of the methods may alternatively be embodied in specialized computer hardware. As will be apparent, the features, and attributes of the specific  
 30 embodiments disclosed above may be combined in different ways to form additional embodiments, all of which are fall within the scope of the present disclosure. Although this disclosure has been described in terms of certain preferred embodiments and applications, other embodiments and applications that are apparent to those of ordinary skill in the art, including embodiments which do not provide all of the features and advantages set forth herein, are also within the  
 35 scope of this disclosure.

Conditional language, such as, among others, "can," "could," "might," or "may," unless specifically stated otherwise, or otherwise understood within the context as used, is generally intended to convey that certain embodiments  
 40 include, while other embodiments do not include, certain features, elements and/or steps. Thus, such conditional language is not generally intended to imply that features, elements and/or steps are in any way required for one or more embodiments or that one or more embodiments necessarily  
 45 include logic for deciding, with or without user input or prompting, whether these features, elements and/or steps are included or are to be performed in any particular embodiment.

Any process descriptions, elements, or blocks in the flow diagrams described herein and/or depicted in the attached figures should be understood as potentially representing modules, segments, or portions of code which include one or more executable instructions for implementing specific logical functions or steps in the process. Alternate implementations  
 50 are included within the scope of the embodiments described herein in which elements or functions may be deleted, executed out of order from that shown or discussed, including

substantially concurrently or in reverse order, depending on the functionality involved, as would be understood by those skilled in the art.

It should be emphasized that many variations and modifications may be made to the above-described embodiments, the elements of which are to be understood as being among other acceptable examples. All such modifications and variations are intended to be included herein within the scope of this disclosure. The foregoing description details certain embodiments of the invention. It will be appreciated, however, that no matter how detailed the foregoing appears in text, the invention can be practiced in many ways. As is also stated above, it should be noted that the use of particular terminology when describing certain features or aspects of the invention should not be taken to imply that the terminology is being re-defined herein to be restricted to including any specific characteristics of the features or aspects of the invention with which that terminology is associated. The scope of the invention should therefore be construed in accordance with the appended claims and any equivalents thereof.

The invention claimed is:

1. An arbitration entity computer system comprising: a hardware processor; and a memory storing a plurality of processing instructions configured for execution by the hardware processor in order to cause the arbitration entity computer system to: receive, by the arbitration entity computer system, from at least one requesting party a request for personal information about a permitting party, wherein the request includes one or more types of personal information and a purpose for the personal information; receive, by the arbitration entity computer system, first authentication information from the at least one requesting party; receive, by the arbitration entity computer system, second authentication information from the permitting party; authenticate, by the arbitration entity computer system, identities of the at least one requesting and permitting parties based on the authentication information received from the at least one requesting and permitting parties; send a request, by the arbitration entity computer system, to the permitting party, the request asking the permitting party for permission to provide the personal information requested by each of the requesting parties; receive, by the arbitration entity computer system, permission from the permitting party to provide at least some of the personal information requested by each of the requesting parties, wherein the permission indicates one or more types of personal information for which access is not granted for each requesting party; access, by the arbitration entity computer system, personal information of the permitting party that is of the one or more requested type; and prepare, by the arbitration entity computer system, a separate set of output data for each of the requesting parties based on the respective purpose for the information, wherein an entity controlling the arbitration entity computer system is separate from the requesting parties and the permitting party.
2. The arbitration entity computer system of claim 1, wherein the one or more types of personal information comprises at least one of credit information, demographic information, and criminal background.
3. The arbitration entity computer system of claim 1, wherein the purpose for the personal information comprises at least one of compatibility between the permitting and requesting parties, assessment of the permitting party's char-

acter, authentication of the permitting party's identity, legitimacy of information provided by the permitting party, and validation of information provided by the permitting party.

4. The arbitration entity computer system of claim 1, wherein, for a first purpose for the personal information, the output data comprises a transformation of the personal information.

5. The arbitration entity computer system of claim 4, wherein the transformation comprises truncating the personal information.

6. The arbitration entity computer system of claim 4, wherein the transformation comprises an abstraction of the personal information.

7. The arbitration entity computer system of claim 6, wherein the personal information comprises a credit score.

8. The arbitration entity computer system of claim 7, wherein the abstraction comprises an expression representative of the credit score.

9. The arbitration entity computer system of claim 8, wherein the expression comprises an icon that ranges from a smile to a frown.

10. The arbitration entity computer system of claim 4, wherein the transformation comprises an indication of whether the permitting party would be a suitable tenant or an indication of whether the permitting party would be romantically compatible with the respective requesting party.

11. The arbitration entity computer system of claim 10, wherein the transformation is based on a default algorithm that is based on one or more attributes of the permitting party that are not publicly available.

12. The arbitration entity computer system of claim 10, wherein the transformation is customizable by the respective requesting party.

13. A method comprising:

- receiving, at an arbitration entity computing device, at least one request for personal information about a permitting party, wherein the at least one request includes one or more types of information and an intended use of the personal information by at least one requesting party;
- receiving, by the arbitration entity computer system, authentication information from the at least one requesting party;
- receiving, by the arbitration entity computer system, authentication information from the permitting party;
- authenticating, by the arbitration entity computer system, identities of the at least one requesting and permitting parties based on the authentication information received from the at least one requesting and permitting parties;
- sending, from the arbitration entity computing device, a request for permission to the permitting party;
- receiving permission by the arbitration entity computing device, from the permitting party, to provide the at least one requesting party access to at least some of the requested personal information, wherein the permission indicates one or more portions of the requested personal information for which access is not granted for each requesting party;
- accessing, by the arbitration entity computing device, the one or more portions of the requested personal information of the permitting party; and
- providing, by the arbitration entity computing device, a separate set of at least some of the accessed personal information to each of the requesting parties based on a respective purpose for the information, wherein an entity controlling the arbitration entity computing device is separate from the requesting party and the permitting party.

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14. The method of claim 13, further comprising:  
 authenticating the permitting party;  
 authenticating the at least one requesting party; and  
 providing the separate set of at least some of the accessed  
 personal information to each requesting party only after  
 authenticating the at least one requesting and permitting  
 parties' identities by determining that there is no identity  
 theft or fraud.

15. The method of claim 13, wherein the permitting party  
 comprises a potential tenant, and the at least one requesting  
 party comprises a landlord.

16. The method of claim 13, wherein the permitting party  
 comprises a first social networker, and the at least one  
 requesting party comprises at least one second social net-  
 worker seeking personal information regarding the first social  
 networker.

17. The method of claim 13, further comprising receiving,  
 by the arbitration entity computing device, from the permit-  
 ting party, restrictions on an amount of personal information  
 to provide to each requesting party.

18. An arbitration entity computer system for authenticated  
 transactions, comprising:

a processor; and  
 a memory in communication with the processor, the  
 memory for storing a plurality of processing instructions  
 for directing the processor to:

receive, by the arbitration entity computer system from a  
 permitting party, permission to provide at least some  
 personal information about the permitting party to one  
 or more receiving parties having attributes provided by  
 the permitting party, wherein the permission indicates  
 one or more types of the personal information for which  
 access is not granted;

receive, by the arbitration entity computer system, authen-  
 tication information from the one or more requesting  
 parties;

receive, by the arbitration entity computer system, authen-  
 tication information from the permitting party;

authenticate, by the arbitration entity computer system,  
 identities of the one or more requesting and permitting

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parties based on the authentication information received  
 from the one or more requesting and permitting parties;  
 access, by the arbitration entity computer system, the one  
 or more types of the personal information about the  
 permitting party;

transform, by the arbitration entity computer system, the  
 accessed one or more types of personal information  
 about the permitting party based on a purpose for the  
 information for each requesting party; and

send, by the arbitration entity computer system, the trans-  
 formed personal information to one or more of the per-  
 mitting party, a third party, a credit bureau, an informa-  
 tion service provider, a financial institution or a party  
 that stores personal information on the permitting party,  
 wherein a separate set of the transformed personal infor-  
 mation is accessible to each of the requesting parties  
 having the attributes provided by the permitting party,  
 wherein an entity controlling the arbitration entity com-  
 puter system is separate from the one or more requesting  
 parties and the permitting party.

19. The arbitration entity computer system of claim 18,  
 wherein the attributes include one or more of a name of an  
 individual, a name of a company, a location, or an intended  
 use of personal information.

20. The arbitration entity computer system of claim 18,  
 wherein the processor transforms the personal information by  
 providing an abstraction representative of the personal infor-  
 mation.

21. The arbitration entity computer system of claim 20,  
 wherein the abstraction comprises an icon.

22. The arbitration entity computer system of claim 1,  
 wherein the one or more types of personal information com-  
 prises at least one of: a credit score, a credit profile with a  
 decision, a full credit profile with personally identifying  
 information removed, a credit profile with some information  
 removed or information regarding the character of the per-  
 mitting party.

\* \* \* \* \*